

REMARKS

This Amendment is submitted in response to the Final Office Action dated April 13, 2004 and Advisory Action dated July 17, 2004, having a shortened statutory period set to expire July 13, 2004. In the present Amendment, Claims 1 and 16 are cancelled, Claims 9-11 are amended and Claims 17-23 are added. Claims 9-15 and 17-23 are now pending.

REJECTIONS UNDER 35 U.S.C. § 102 and 103

In the Final Office Action dated April 13, 2004, , Claims 1, 9-10 and 12-16 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Daigle* (U.S. Patent No. 5,795,297 – "*Daigle*"). Furthermore, Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daigle* in view of *Allen et al.* (U.S. Patent No. 4,570,217 – "*Allen*"). Claims 9-16 are now cancelled. However, to the extent that the Examiner may apply *Daigle* and *Allen* to newly added Claims 17-21, Applicants wish to point out the following distinctions.

With regards to exemplary Claim 17, the cited prior art does not teach or suggest "a SCSI logic unit...for transmitting a data file from said dual port memory directly to said hard disk over said SCSI bus, thus bypassing said system bus." As shown in Figure 2, the prior art process for transferring files from a LAN logic unit to Main Memory (202) is via a System Bus (203), and then to transfer files from the Main Memory to a Hard Disk (205) via the SCSI adapter (204). As shown in Figure 3 of the present application, the LAN Adapter (301) according to the present invention comprises a new SCSI logic Unit (303) that transfers data files to the Hard Disk (205) directly from the LAN Adapter Logic Unit (302) (via the Dual-Port Memory 304) via the SCSI bus (208). Note that the System Bus (203) is totally bypassed.

With regards to exemplary Claim 18, the prior art does not teach or suggest a dedicated microcontroller (306) that selectively routes data to either the system bus (203) or the SCSI bus (208).

In *Allen*, the dual port memory shown in Figure 74 has only two ports, such that the data transfer is always performed between the first and the second port. Conversely, in the present invention, as shown in Figure 3, the dual-port memory (304) has three ports, which are connected to LAN logic unit 302, SCSI logic unit 303, and system bus interface 305. Data

coming from the LAN into LAN logic unit 302 can be transferred to one of the two other output ports, connected respectively to SCSI logic unit 303 and system bus interface 305.

With regards to exemplary Claim 9, the cited prior art does not teach or suggest a system in which incoming data packets are examined by a microcontroller in a NIC, and if the packet is destined for a non-volatile memory (such as a SCSI hard drive – see Claim 12), “then the microcontroller bypasses the system bus for the volatile system memory and directly communicates with the non-volatile memory to transfer the packet from the non-system memory in the network adapter to the system's non-volatile memory.”

With regards to exemplary Claim 17, the cited prior art does not teach or suggest a “dedicated microcontroller” that “initializes the DMA unit with a master address that causes an incoming packet of data from a network to be stored locally in the three-port buffer memory, and wherein the non-system bus interface, under the control of the dedicated microcontroller, transfers the packet of data stored in the three-port buffer memory to a non-volatile memory.” That is, the cited prior art does not teach or suggest using a DMA unit to directly send incoming data to a three-port memory buffer, as described in Lines 5-8 of Page 15 of the present invention’s specification.

CONCLUSION

As the prior art does not teach or suggest all of the limitations of the presently claimed invention, Applicants respectfully request a Notice of Allowance for all pending claims.

A one month extension of time is hereby requested for this responsive amendment. Therefore, please charge **IBM DEPOSIT ACCOUNT NO.** in the amount of **\$110.00** to cover the fee for this extension. In addition, please charge any additional fees necessary to further the prosecution of this application to **IBM DEPOSIT ACCOUNT NO. 09-0457**.

Respectfully submitted,



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